Claims

1) Nucleic acid sequence encoding a 15 kD *Babesia canis* associated protein or an immunogenic fragment of said protein, said protein or immunogenic fragment thereof having at least 80 %, preferably 90 %, more preferably 95 % homology with the amino acid sequence as depicted in SEQ ID NO: 2.

2) Nucleic acid sequence encoding a 32 kD *Babesia canis* associated protein or an immunogenic fragment of said protein, said protein or immunogenic fragment thereof having at least 80 %, preferably 90 %, more preferably 95 % homology with the amino acid sequence as depicted in SEQ ID NO: 4.

3) cDNA fragment comprising a nucleic acid sequence according to claim 1or 2.

4) Recombinant DNA molecule comprising a nucleic acid sequence according to claim 1 or 2 or a cDNA fragment according to claim 3, under the control of a functionally linked promoter.

5) Live recombinant carrier comprising a cDNA fragment according to claim 3 or a recombinant DNA molecule according to claim 4.

6) Host cell comprising a nucleic acid sequence according to claim 1 or 2, a cDNA fragment according to claim 3, a recombinant DNA molecule according to claim 4 or a live recombinant carrier according to claim 5.

7) *Babesia canis* associated protein, said protein having a molecular weight of 15 kD and comprising an amino acid sequence that is at least 80 % homologous to the amino acid sequence as depicted in SEQ ID NO: 2 or an immunogenic fragment of said protein.

8) *Babesia canis* associated protein according to claim 7, wherein the amino acid sequence is at least 85 %, preferably 90 %, more preferably 95 % homologous to the amino acid sequence as depicted in SEQ ID NO: 2, or an immunogenic fragment of

said protein.

9) *Babesia canis* associated protein, said protein having a molecular weight of 32 kD and comprising an amino acid sequence that is at least 80 % homologous to the amino acid sequence as depicted in SEQ ID NO: 4 or an immunogenic fragment of said protein.

10) *Babesia canis* associated protein according to claim 9, wherein the amino acid sequence is at least 85 %, preferably 90 %, more preferably 95 % homologous to the amino acid sequence as depicted in SEQ ID NO: 4, or an immunogenic fragment of said protein.

11) *Babesia canis* associated protein according to claims 7-10 for use in a vaccine.

12) Use of a *Babesia canis* associated protein according to claims 7-10 for the manufacturing of a vaccine for combating *Babesia canis* infections.

13) Vaccine for combating *Babesia canis* infections, characterised in that it comprises a nucleic acid sequence according to claim 1 or 2, a cDNA fragment according to claim 3, a recombinant DNA molecule according to claim 4, a live recombinant carrier according to claim 5, a host cell according to claim 6 or a protein according to claims 7-10, and a pharmaceutically acceptable carrier.

14) Vaccine according to claim 13, characterised in that it comprises an adjuvant.

15) Vaccine according to claim 13 or 14, characterised in that it comprises an additional antigen derived from a virus or micro-organism pathogenic to dogs or genetic information encoding said antigen.

16) Vaccine according to claim 15, characterised in that said virus or micro-organism pathogenic to dogs is selected from the group of *Ehrlichia canis*, *Babesia gibsoni*, *vogeli*, *rossi*, *Leishmania donovani*-complex, Canine parvovirus, Canine distempervirus, *Leptospira interrogans serovar canicola, icterohaemorrhagiae,*

pomona, grippotyphosa, bratislava, Canine hepatitisvirus, Canine parainfluenzavirus, rabies virus, *Hepatozoon canis* and *Borrelia burgdorferi*

17) Vaccine for combating *Babesia canis* infections, characterised in that it comprises antibodies against a protein according to claims 7-10, or an immunogenic fragment thereof.

18) Method for the preparation of a vaccine according to claims 13-16, said method comprising the admixing of a nucleic acid sequence according to claim 1 or 2, a cDNA fragment according to claim 3, a recombinant DNA molecule according to claim 4, a live recombinant carrier according to claim 5, a host cell according to claim 6 or a protein according to claims 7-10 and a pharmaceutically acceptable carrier.

19) Method for the preparation of a vaccine according to claim 17, said method comprising the admixing of said antibodies and a pharmaceutically acceptable carrier.

20) Diagnostic test for the detection of *Babesia canis* associated RNA characterised in that the test comprises a nucleic acid sequence that is at least 70 % homologous to the nucleic acid sequence as depicted in SEQ ID NO: 1 or 3 or a nucleotide sequence that is complementary to said nucleic acid sequence, or a fragment thereof having a length of at least 12, preferably 15, more preferably 18 nucleotides.

21) Diagnostic test for the detection of antibodies against *Babesia canis* associated antigenic material, characterised in that said test comprises a protein or an immunogenic fragment thereof as defined in claims 7-10.

22) Diagnostic test for the detection of *Babesia canis* associated antigenic material, characterised in that said test comprises antibodies against a protein or an immunogenic fragment thereof as defined in claims 7-10.